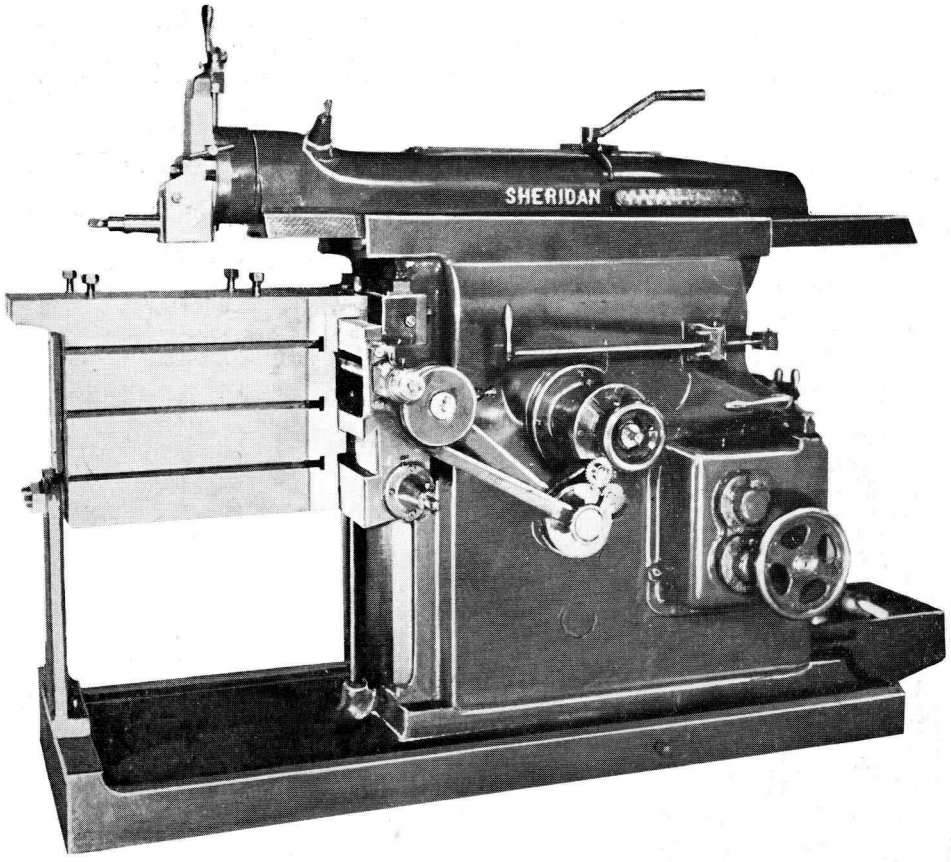
THE SHERIDAN
24-inch Heavy Duty Precision Shaper



T. W. & C. B. SHERIDAN CO.

Established 1835

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Rickmansworth, Herts, England

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THE SHERIDAN 24″ SHAPER is of heavy duty construction with an integral gear box. All important shafts are carried on Timken roller bearings and multiple splines are used throughout.

The machine is equipped with the latest type Twin Disc Clutch with hand-operated brake. The drive pulley is arranged for V-Belt drive, using four B-section belts.

Ram speeds are as follows: 12, 19, 27, 37, 50, 75, 108 and 151.

Machine is equipped with pressure lubrication to all important points. A pressure pump draws from the sump in bottom of base; drainage is arranged to return to this point.

Machine is arranged for cross feeding in either direction.

SETTING UP MACHINE

The Shaper must be set level and bolted to a good concrete foundation or equivalent. The machine can be checked for level by the use of an accurate spirit level on the work table. Parallelism of the front of the base may be checked by means of an indicator, checking first with the front support removed, then checking the table with this in place. Any compensation for an uneven foundation should be made with steel shims at bolt holes, and the machine should rest evenly at all such points before tightening the foundation bolts.

STARTING THE MACHINE

Remove grease from finished surfaces with kerosene and coat all such surfaces with oil. Fill all oil cups with a good grade of S.A.E. No. 30 oil and lubricate these parts at least twice daily while the machine is in use. Fill all pressure fittings with a good grade of ball bearing grease, filling these points once a month while the machine is in use. The main lubrication of the machine is through a forced feed Bijur system operated from the main gear. Fill oil reservoir in the bed to the indicated level, using a highly refined mineral oil of 450/600 S.S.U. viscosity at 100° F. This oil should be changed twice yearly, at which time the oil filter, which is an integral part of the pump, should be cleaned.

Disengage feed pawl while doing preliminary work on the machine. The motor should revolve counterclockwise facing the pulley end.

With the motor running, the machine is started by pushing the clutch lever toward the machine; stopped, by pulling the clutch lever away from the machine.

To adjust length of stroke move ram to its farthest back position. Indicator pointer on ram will then show the amount of stroke. The stroke adjustment clamping nut is then loosened and the crank handle applied to change the amount of stroke, which will always be indicated by the pointer on the ram. After adjustment tighten clamping nut.

The ram may be positioned by loosening the ram clamp and cranking the ram positioning control. This may be done while the machine is in motion. Be sure to tighten the ram clamp after making this adjustment.

The tool head can be swiveled 90° each side of the center position. The clapper box may also be adjusted through a small angle. A tool slide lock prevents movement of tool while the machine is in use.

Before raising or lowering table and crossrail, loosen the front support and the frame clamping bolts. The table should be adjusted as high as possible to reduce the tool overhang to a minimum. After cranking the table and crossrail to the proper position, lock the frame clamping bolts, then tighten the front support.

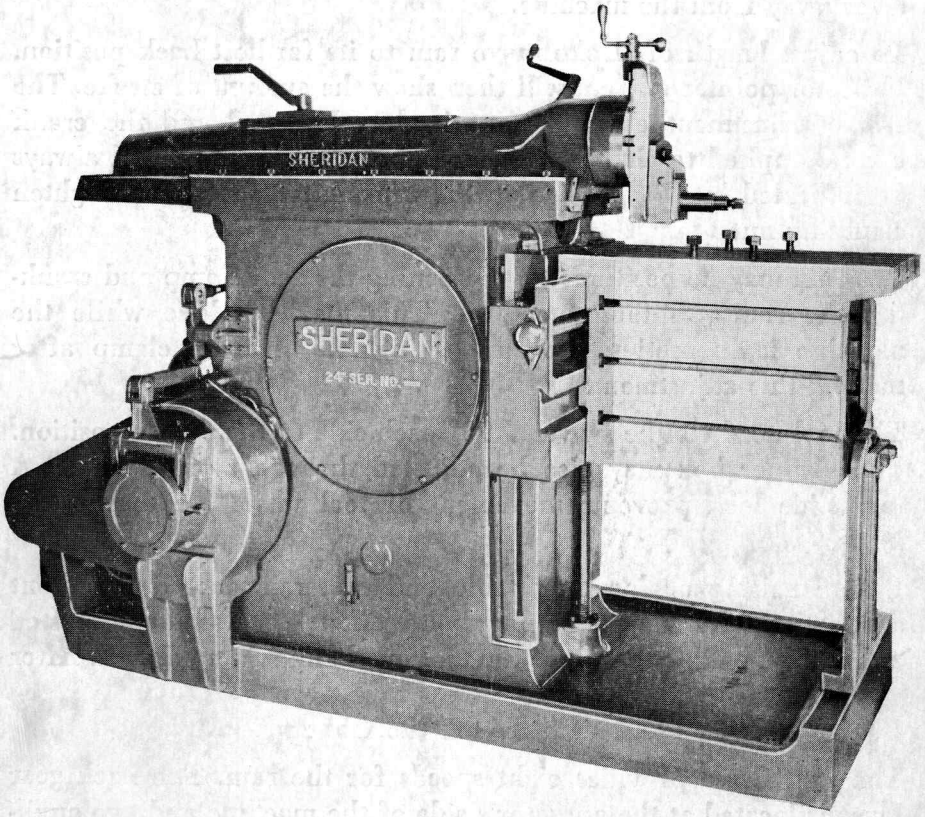
The gear drive provides eight speeds for the ram. The back gear lever is located at the operator's side of the machine and two auxiliary gear shifting levers are located at the back of the machine above the drive motor. Always disengage the clutch when shifting gears and make sure that lever locking pins are in place before starting the machine.

The feed pawl pin provides for feeding in either direction with a central off position. The table is provided with a hand traverse which can be operated in the feed direction or in either direction with the feed pawl disengaged. To adjust the amount of feed, loosen the feed selector nut, adjust throw of the feed crank and tighten nut to clamp in the desired position.

RENEWAL PARTS

In ordering renewal parts, always specify the serial number of the machine, the part number, and the name or description of the part.

24-inch Sheridan Shaper Specifications



RAM

Length of stroke, 25 inches

Bearing in column, 40½ x 11¼ inches

TABLE

Horizontal travel, 21 inches
Vertical travel, 17 inches
Maximum distance table to ram, 20½ inches

Length of top, 29½ inches
Width of top, 16 inches
Depth, 18 inches

HEAD

Diameter of head, 8½ inches

Vertical travel, 6 inches

Size of tools, ⅞ x 2 inches

Number of speeds to ram, 8
Range of cutting strokes per min., 12 to 151
Range of cross feeds, 0-3/16 inch
R.P.M. of drive, 575

Drive pulley grooved for 4 B-Section "V" Belts
Drive pulley diameter, 16 inches O.D.
Weight without motor, 6050 lbs.
Motor speed, R.P.M., 1800
Motor horsepower, 7½